

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: SHAPER

Report Number: P241159

Luminaire Tested: **1800-X-80-L40-1-W-UNV-STD-X-X**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241159  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (ITL90337-GONIOPHOTOMETRY)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 1800-X-80-L40-1-W-UNV-STD-X-X  
Description: SHAPER 1800 SERIES LED PENDANT DIRECT DOWNLIGHT  
WIDE DISTRIBUTION  
Light Source: (168) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4248.4 lumens  
Efficiency: N/A  
Efficacy: 101.6 lumens/watt  
Spacing Criteria (0/90/45): 1.48 / 1.48 / 1.61  
Luminous Opening: Circular (Dia: 1.17' x H: 0')  
CIE Type: Direct

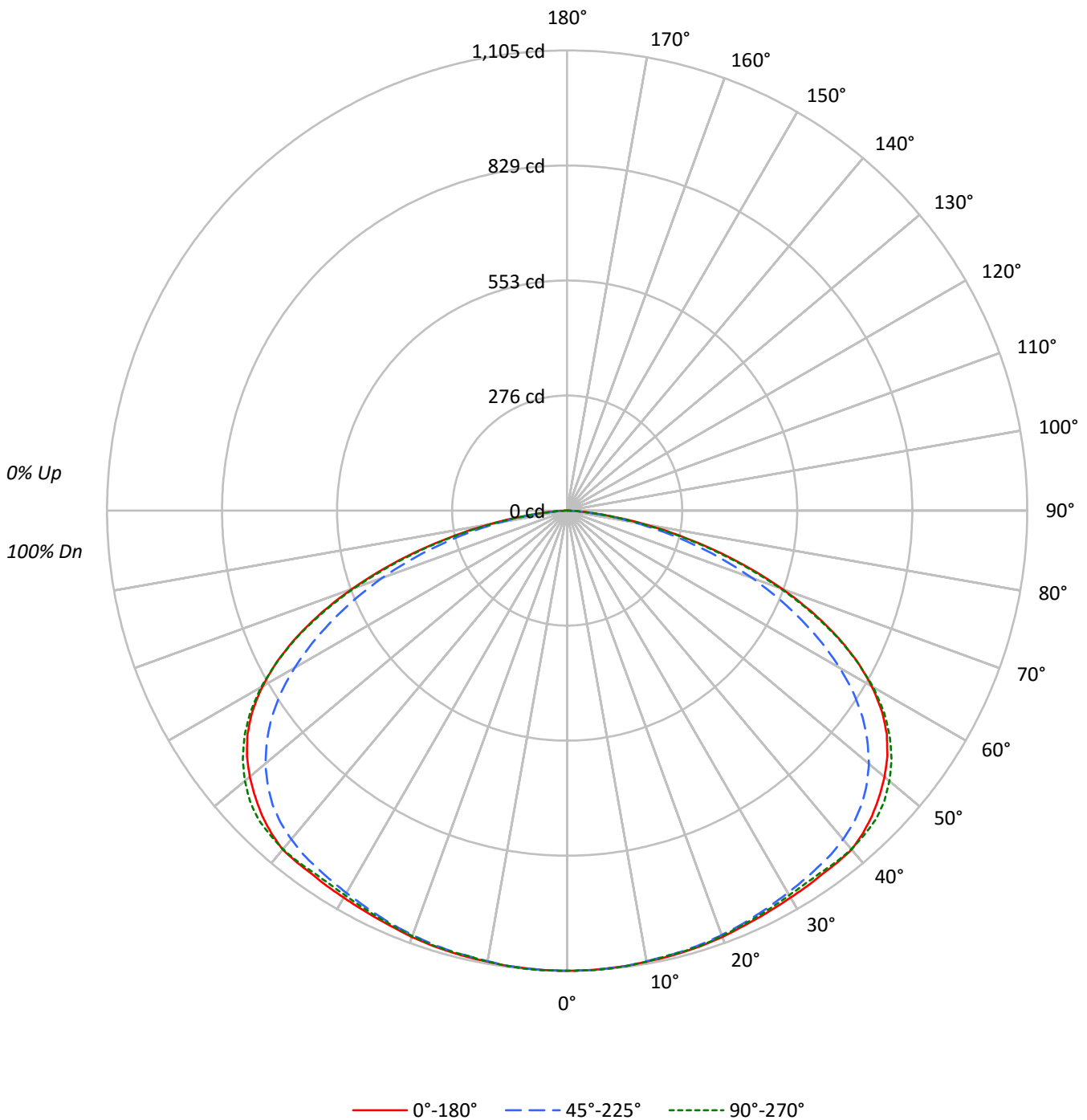
Input Watts (W): 41.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	61	85	75	67	60	72	65	59	69	63	58	67	62	57	55
4	80	67	58	51	78	66	57	50	63	56	49	61	54	49	59	53	48	46
5	73	59	50	43	71	58	49	43	56	48	42	54	47	42	52	46	41	39
6	67	53	44	37	65	52	43	37	50	42	36	48	41	36	47	40	35	33
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29
8	57	43	34	28	56	43	34	28	41	33	28	40	33	28	39	32	27	25
9	53	39	31	25	52	39	31	25	38	30	25	37	30	25	35	29	24	23
10	50	36	28	22	49	36	28	22	35	27	22	34	27	22	33	27	22	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	11126	11126	11126
5°	11156	11156	11169
10°	11246	11232	11246
15°	11425	11399	11411
20°	11675	11621	11649
25°	12005	11921	11963
30°	12475	12325	12400
35°	13109	12873	13047
40°	13968	13546	13951
45°	14750	14238	14932
50°	15583	14819	15823
55°	16451	15213	16607
60°	17013	15230	17089
65°	17042	14781	16980
70°	16189	13887	16001
75°	14212	12220	13865
80°	10924	9440	10553
85°	5776	4737	5476



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.2	2.5
10°-20°	309.8	7.3
20°-30°	497.6	11.7
30°-40°	663.3	15.6
40°-50°	787.2	18.5
50°-60°	804.7	18.9
60°-70°	656.0	15.4
70°-80°	357.9	8.4
80°-90°	66.7	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	912.7	21.5
0°-40°	1576.0	37.1
0°-60°	3167.8	74.6
0°-90°	4248.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4248.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1105	1105	1105	1105	1105	
5°	1104	1104	1104	1104	1105	105
15°	1096	1095	1094	1094	1095	310
25°	1081	1077	1073	1076	1077	500
35°	1066	1059	1047	1055	1061	670
45°	1036	1018	1000	1027	1049	799
55°	937	901	867	909	946	834
65°	715	668	620	667	713	701
75°	365	338	314	338	356	387
85°	50	47	41	46	47	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1105.0	1105.0	1105.0	1105.0	1105.0
2.5°	1105.0	1105.0	1105.0	1105.0	1105.0
5°	1103.7	1103.7	1103.7	1103.7	1105.0
7.5°	1102.4	1102.4	1102.4	1102.4	1102.4
10°	1099.9	1099.9	1098.6	1098.6	1099.9
12.5°	1098.6	1097.3	1096.0	1096.0	1096.0
15°	1096.0	1094.7	1093.5	1093.5	1094.7
17.5°	1093.5	1090.9	1089.6	1089.6	1092.2
20°	1089.6	1085.8	1084.5	1085.8	1087.1
22.5°	1084.5	1081.9	1079.4	1080.6	1081.9
25°	1080.6	1076.8	1073.0	1075.5	1076.8
27.5°	1076.8	1071.7	1066.5	1069.1	1071.7
30°	1073.0	1066.5	1060.1	1062.7	1066.5
32.5°	1070.4	1062.7	1053.7	1058.8	1062.7
35°	1066.5	1058.8	1047.3	1055.0	1061.4
37.5°	1065.3	1053.7	1040.9	1051.2	1062.7
40°	1062.7	1046.0	1030.6	1047.3	1061.4
42.5°	1051.2	1034.5	1017.8	1038.3	1056.3
45°	1035.8	1017.8	999.9	1026.8	1048.6
47.5°	1016.5	997.3	975.5	1007.6	1033.2
50°	994.8	970.4	946.0	980.7	1010.1
52.5°	969.1	938.4	908.9	948.6	981.9
55°	937.1	901.2	866.6	908.9	946.0
57.5°	896.0	856.3	815.3	861.4	902.5
60°	844.8	802.5	756.3	803.8	848.6
62.5°	785.8	738.4	690.9	740.9	784.5
65°	715.3	667.9	620.4	666.6	712.7
67.5°	635.8	589.7	547.4	588.4	630.7
70°	549.9	508.9	471.7	506.4	543.5
72.5°	458.9	424.3	393.5	423.0	449.9
75°	365.3	338.4	314.1	338.4	356.4
77.5°	274.3	253.8	237.2	256.4	266.6
80°	188.4	175.6	162.8	176.9	182.0
82.5°	111.5	106.4	96.1	105.1	107.7
85°	50.0	47.4	41.0	46.1	47.4
87.5°	9.0	7.7	6.4	7.7	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)